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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,125	08/07/2001	Didier Communi	9409/2092	3058
27495 7:	590 04/16/2002			
PALMER & DODGE, LLP			EXAMINER	
KATHLEEN M. WILLIAMS / STR 111 HUNTINGTON AVENUE BOSTON, MA 02199			LI, RUIXIANG	
			ART UNIT	PAPER NUMBER
			1646	
			DATE MAILED: 04/16/2002	9

Please find below and/or attached an Office communication concerning this application or proceeding.

· ·	Application No.	Applicant(s)			
	09/924,125	COMMUNI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ruixiang Li	1646			
The MAILING DATE of this communication app Period for Reply		correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	within the statutory minimum of thirty (30) day a reply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 05 D	December 2001 .				
	s action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-45 is/are pending in the application					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) <u>1-45</u> are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accep	oted or b) objected to by the Example	miner.			
Applicant may not request that any objection to the					
11) The proposed drawing correction filed on		oved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents	s have been received.				
2. Certified copies of the priority documents	s have been received in Applicati	on No			
3. Copies of the certified copies of the prior application from the International Bur * See the attached detailed Office action for a list of the certified copies of the prior and prior are also below the prior and prior and prior are also below the prior and prior and prior are also below the prior and prior are applicable.	reau (PCT Rule 17.2(a)).				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	(PTO-413) Paper No(s) Patent Application (PTO-152)			
S. Patent and Trademark Office					

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## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6, drawn to a method for detecting the activity of GPR86 in a sample, classified in class 435, subclass 7.1, and class 436, subclass 501.
  - II. Claims 7-14 and 23, 24, 25 (in part), 26-28, drawn to a method of screening for a candidate modulator of GPR86 activity, which is a natural or synthetic peptide, or a polypeptide, classified in class 435, subclass 7.1, and class 436, subclass 501.
  - III. Claims 7-14 and 23, 24, 25 (in part), 26-28, drawn to a method of screening for a candidate modulator of GPR86 activity, which is an antibody or antigen-binding fragment thereof, classified in class 435, subclass 7.1, and class 436, subclass 501.
  - IV. Claims 7-14 and 23, 24, 25 (in part), 26-28, drawn to a method of screening for a candidate modulator of GPR86 activity, which is a lipid, classified in class 436, subclass 501.
  - V. Claims 7-14 and 23, 24, 25 (in part), 26-28, drawn to a method of screening for a candidate modulator of GPR86 activity, which is a carbohydrate, classified in class 436, subclass 501.
  - VI. Claims 7-14 and 23, 24, 25 (in part), 26-28, drawn to a method of screening for a candidate modulator of GPR86 activity, which is a nucleic acid, classified in class 436, subclass 501.

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- VII. Claims 7-14 and 23, 24, 25 (in part), 26-28, drawn to a method of screening for a candidate modulator of GPR86 activity, which is a small organic molecule, classified in class 436, subclass 501.
- VIII. Claim 15-21 and 45, drawn to a kit comprising GPR86 and ADP, classified in class 530, subclass 350.
- IX. Claim 22, drawn to a non-human animal, classified in class 800, subclass 8.
- X. Claim 29, drawn to a method of modulating the activity of a GPR86 polypeptide, classified in class 436, subclass 501.
- XI. Claims 30-32, drawn to a method of diagnosing a disease or disorder comprising detecting binding of an antibody to a tissue sample, classified in class 435, subclass 7.1.
- XII. Claims 33, 35, and 36 (in part), drawn to a method of diagnosing a disease or disorder comprising amplifying a GPR86 polynucleotide, classified in class 436, subclass 6.
- XIII. Claims 34 and 36 (in part), drawn to a method of diagnosing a disease or disorder comprising amplifying a GPR86 ligand polynucleotide, classified in class 436, subclass 6.
- XIV. Claim 37, drawn to an antibody, classified in class 530, subclass 387.1.
- XV. Claim 38, drawn to a method of detecting the presence, in a sample, of an agent that modulates the function of GPR86, classified in class 436, subclass 501.
- XVI. Claims 39-42 (in part), drawn to a kit for screening for agents that modulate the signaling activity of GPR86 comprising an isolated polynucleotide encoding a

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GPR86 polypeptide or a cell transformed with a polynucleotide encoding a GPR86 polypeptide. Such agents are detected by a GPR86-specific antibody, classified in class 536, subclass 23.5; and class 435, subclasses 325, 252.3, 254.11, 254.2.

- XVII. Claims 39-42, drawn to a kit for screening for agents that modulate the signaling activity of GPR86 comprising an isolated polynucleotide encoding a GPR86 polypeptide or a ceii transformed with a polynucleotide encoding a GPR86 polypeptide. Such agents are detected by a GPR86-specific nucleic acid probe, classified in class 536, subclass 23.5; and class 435, subclasses 325, 252.3, 254.11, 254.2.
- XVIII. Claim 43-45 (in part), drawn to a kit for the diagnosis of a disease or disorder comprising a GPR86 polypeptide. The said disease is detected using an antibody, classified in class 530, subclass 350.
- XIX. Claim 43-45 (in part), drawn to a kit for the diagnosis of a disease or disorder comprising a GPR86 polypeptide. The said disease is detected using a GPR-specific nucleic acid probe, classified in class 530, subclass 350.
- 2. The inventions are distinct, each from the other for the following reasons. Inventions I-VII, X-XIII, and XV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §806.04, MPEP §808.01). In the instance case the different inventions are drawn to completely different methods each having completely different method steps, using different

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compositions, and having completely different outcomes. Thus, all the methods are exclusive.

- 3. Inventions VIII, IX, XIV, and XVI-XIX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §806.04, MPEP §808.01). In the instance case, the different inventions are drawn to completely different products, polynucleotides, polypeptides, or antibodies, kits, or a transgenic animal. These molecules (or animals) have completely different structures and biological functions which are not interchangeable and which require non-cohesive searches and considerations.
- 4. Inventions I-VII, X-XIII, and XV are either related to Inventions VIII, IX, XIV, and XVI-XIX as product and process of use or drawn to distinct product and method inventions. In the former case, the invention can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP §806.05 (h)). In the instance case, the product(s) as claimed can be used in a materially different process. For example, polynucleotides may be used to produce polypeptides; polypeptides may be used to immunize mice to produce antibodies; antibodies may be used to purify polypeptides.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and the search required for a single group is not required for any other group, restriction for examination purposes as indicated is proper.

Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48 (b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48 (b) and by the fee required under 37 CFR 1.17 (l).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (703) 306-0282. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for this Group is (703) 305-3014 or (703) 308-4242.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [yvonne.eyler@uspto.gov].

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All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is Elyabeth C. Kennen (703) 308-0196.

Ruixiang Li Examiner April 11, 2002 PRIMARY EXAMINER